DEVICE WITH AN ELECTROMOTOR

FIELD OF THE INVENTION:

The invention concerns an arrangement having an electric motor, and in particular having an electronically commutated motor (ECM).

BACKGROUND: Examples of such motors are shown, for example, in the following documents [of the Applicant] assigned to the assignee of the present application:

DE 44 41 372 A1   [(internal: D183)]   = 5,845,045 JESKE

EP 0 658 973 B1   [(internal: EP184)] = 5,590,235 JESKE

DE 296 06 939.6-U   [(internal: D190i)] = EP 0 739 084 A2

DE 195 15 944 A1   [(internal: D192)]

EP 0 741 449 A1   [(internal: EP193)] = 6,163,117

EP 0 744 807 B1   [(internal: EP194)] = 5,847,523

DE 195 18 991 A1   [(internal: D195)]

DE 196 47 983 A1   [(internal: D199i)] = 6,091,887

EP 0 780 962 A2   [(internal: EP200)]

It would not be possible to reproduce the extensive content of these documents even in summarized form, and reference is therefore made to their complete contents.

SUMMARY OF THE INVENTION:

It is an object of the invention to make available a new arrangement and a new method for controlling an electric motor.

According to the invention, this object is achieved by connecting an output signal of a microprocessor, which can take on either a high level or a low level, to a voltage divider which regulates motor current, and varying the microprocessor output signal to achieve a desired motor current characteristic curve. [the subject matter of claim 1]. It is possible thereby, in program-controlled fashion, either to extend acceleration (called a "soft start") or to make acceleration as short as possible by

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raising the operating point for the current control system during the acceleration period so that the motor current can be higher during acceleration than later in normal operation.

A preferred method is <u>to set a motor current limit to a first value for motor startup, to monitor the startup, and to reset the motor current limit to a second value after startup</u>. [the subject matter of claim 11]. This method can be flexibly adapted to the needs of a user, since the limiting values can be adjusted in program-controlled fashion.

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Page 2, lines 20-21, insert a period after "invention)" and cancel ", and from the other dependent claims. In the drawings:"

Page 2, after line 21, insert: --BRIEF FIGURE DESCRIPTION:--.

Page 4, after line 3, insert --DETAILED DESCRIPTION:--.

Rule 1.126 Page 31, line 1, change "Claims"

to --WHAT IS CLAIMED IS:--.

Rule 1.126 Page 44, change "Abstract"

to --ABSTRACT OF THE DISCLOSURE--.